

**Practice: 342 - Critical Area Planting****Scenario: #1 - Native seeding - light tillage****Scenario Description:**

Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include seedbed preparation with light tillage implements, native grass seed, and fertilizer and lime with application.

**Before Situation:**

Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, etc) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.

**After Situation:**

This typical 1.0 acre critical area is stabilized by applying fertilizer, lime and seed. Soil amendments will be incorporated at an depth of six inches to improve fertility and ensure establishment of permanent vegetative cover. Apply fertilizer and an application of lime. Prepare a firm, weed free seedbed so that proper germination and stand establishment are ensured. Once the seedbed has been prepared, apply the seed mixture for a vegetative cover.

**Scenario Feature Measure:** area seeded

**Scenario Unit:** Acre

**Scenario Typical Size:** 1

**Scenario Cost:** \$468.50

**Scenario Cost/Unit:** \$468.50

**Cost Details (by category):**

| Component Name  | ID   | Component Description  | Unit  | Price (\$/unit) | Quantity | Cost     |
|---|------|--|-------|-----------------|----------|----------|
| <b>Equipment/Installation</b>   |      |  |       |                 |          |          |
| Seeding Operation, Broadcast, Ground                                  | 959  | Broadcast seed via ground operation. May require post tillage operation to incorporate seed. Includes equipment, power unit and labor costs. | Acre  | \$11.68         | 1        | \$11.68  |
| Tillage, Light  | 945  | Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.   | Acre  | \$10.30         | 1        | \$10.30  |
| Cultipacking  | 1100 | Includes equipment, power unit and labor costs.  | Acre  | \$7.84          | 1        | \$7.84   |
| Fertilizer, ground application, dry bulk                              | 950  | Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.                               | Acre  | \$6.29          | 1        | \$6.29   |
| <b>Materials</b>  |      |  |       |                 |          |          |
| Potassium, K2O  | 74   | K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.                                 | Pound | \$0.59          | 60       | \$35.40  |
| One Species, Warm Season, Introduced Perennial Grass (seed or sprigs) | 2323 | Introduced, warm season perennial grass seed or sprig. Includes material and shipping only.  | Acre  | \$64.09         | 1        | \$64.09  |
| Phosphorus, P2O5  | 73   | Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.                | Pound | \$0.78          | 60       | \$46.80  |
| Lime, ENM   | 75   | Fertilizer: Limestone Spread on field.   | Ton   | \$143.05        | 2        | \$286.10 |

**Practice: 342 - Critical Area Planting****Scenario: #2 - Introduced Grass light tillage****Scenario Description:**

Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include seedbed preparation with typical tillage implements, grass seed, companion crop, and fertilizer and lime with application.

**Before Situation:**

Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.

**After Situation:**

This typical 1.0 acre critical area is stabilized by applying fertilizer, lime and seed. Soil amendments will be incorporated at an depth of six inches to improve fertility and ensure establishment of permanent vegetative cover. Apply fertilizer along with an application of lime. Prepare a firm, weed free seedbed so that proper germination and stand establishment are ensured. Once the seedbed has been prepared, apply the grass seed mixture for a vegetative cover.

**Scenario Feature Measure:** area seeded

**Scenario Unit:** Acre

**Scenario Typical Size:** 1

**Scenario Cost:** \$550.87

**Scenario Cost/Unit:** \$550.87

**Cost Details (by category):**

| Component Name  | ID   | Component Description   | Unit  | Price (\$/unit) | Quantity | Cost     |
|---|------|---|-------|-----------------|----------|----------|
| <b>Equipment/Installation</b>   |      |   |       |                 |          |          |
| Tillage, Light  | 945  | Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.                          | Acre  | \$10.30         | 2        | \$20.60  |
| Seeding Operation, No Till/Grass Drill                                | 960  | No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.                                     | Acre  | \$19.75         | 1        | \$19.75  |
| Fertilizer, ground application, dry bulk                              | 950  | Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.                | Acre  | \$6.29          | 1        | \$6.29   |
| Cultipacking  | 1100 | Includes equipment, power unit and labor costs.   | Acre  | \$7.84          | 1        | \$7.84   |
| <b>Materials</b>  |      |   |       |                 |          |          |
| Nitrogen (N), Urea  | 71   | Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.              | Pound | \$0.64          | 100      | \$64.00  |
| Lime, ENM   | 75   | Fertilizer: Limestone Spread on field.  | Ton   | \$143.05        | 2        | \$286.10 |
| One Species, Warm Season, Introduced Perennial Grass (seed or sprigs) | 2323 | Introduced, warm season perennial grass seed or sprig. Includes material and shipping only.                                   | Acre  | \$64.09         | 1        | \$64.09  |
| Phosphorus, P2O5  | 73   | Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed. | Pound | \$0.78          | 60       | \$46.80  |
| Potassium, K2O  | 74   | K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.                  | Pound | \$0.59          | 60       | \$35.40  |

**Practice: 342 - Critical Area Planting****Scenario: #3 - Grass Hydroseeding****Scenario Description:**

Establishment of permanent vegetation on a site that is void or nearly void of vegetation due to a natural occurrence or a newly constructed conservation practice. Costs include hydroseeding steep areas, grass seed, companion crop, and fertilizer and lime with application.

**Before Situation:**

Areas that are void or nearly void of vegetation, resulting in bare soil being exposed to erosive processes. The exposed areas may be caused from recent natural occurrences (fire, flood, wind, etc.) or due to newly constructed conservation practices such as waterways, terraces, water and sediment basins or dams. The exposed areas will be subject to wind erosion, sheet and rill erosion, or visible rills may have already occurred. Runoff from the area flows into streams, water courses or other water bodies causing degradation to the receiving waters. The soil typically has a pH imbalance and low fertility.

**After Situation:**

This typical 1.0 acre critical area is stabilized by applying fertilizer, lime and seed. Soil amendments and seed will be spread by hydroseeding to ensure establishment of permanent vegetative cover. Apply fertilizer along with an application of lime.

**Scenario Feature Measure:** area seeded

**Scenario Unit:** Acre

**Scenario Typical Size:** 1

**Scenario Cost:** \$1,575.56

**Scenario Cost/Unit:** \$1,575.56

**Cost Details (by category):**

| Component Name  | ID   | Component Description   | Unit  | Price (\$/unit) | Quantity | Cost     |
|---|------|---|-------|-----------------|----------|----------|
| <b>Equipment/Installation</b>   |      |   |       |                 |          |          |
| Seeding Operation, hydroseeder  | 1291 | Hydroseeding with typical 1500 to 3600 gallon seeder. Includes all costs for equipment, power unit, and labor.                | Acre  | \$829.37        | 1        | \$829.37 |
| <b>Materials</b>  |      |   |       |                 |          |          |
| Phosphorus, P2O5  | 73   | Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed. | Pound | \$0.78          | 60       | \$46.80  |
| Potassium, K2O  | 74   | K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.                  | Pound | \$0.59          | 60       | \$35.40  |
| Lime, ENM   | 75   | Fertilizer: Limestone Spread on field.  | Ton   | \$143.05        | 2        | \$286.10 |
| Nitrogen (N), Urea  | 71   | Price per pound of N supplied by Urea. Price is not per pound of total product applied, no conversion is needed.              | Pound | \$0.64          | 100      | \$64.00  |
| One Species, Warm Season, Introduced Perennial Grass (seed or sprigs) | 2323 | Introduced, warm season perennial grass seed or sprig. Includes material and shipping only.                                   | Acre  | \$64.09         | 1        | \$64.09  |
| <b>Mobilization</b>   |      |   |       |                 |          |          |
| Mobilization, medium equipment  | 1139 | Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.   | Each  | \$249.80        | 1        | \$249.80 |